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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,761	06/20/2005	Eberhard Zielke	2002P20417	5899

24131 7590 11/14/2007
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EXAMINER	
HIGGINS, GERARD T	

ART UNIT	PAPER NUMBER
4174	

MAIL DATE	DELIVERY MODE
11/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/539,761	ZIELKE, EBERHARD	
	Examiner	Art Unit	
	Gerard T. Higgins, Ph.D.	4174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06/20/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Zielke (WO 99/65128), which is the international application for the US national stage patent 6,627,831, which is used herein as an English translation.

Zielke discloses an "insulating component, which is at least partially composed of plastic, for high-voltage systems, in particular for use in gas-insulated systems, whose conductivity is increased in the region of its surface" (col. 1, lines 9-12). Zielke further discloses parts **9** and **10** of Figure 1. Part **9** is an "insulating component...which is normally composed of polytetrafluoroethylene" (col. 3, lines 26-28). In order to prevent displacement currents and flashovers, the region of the end face (surface sites) **10** was treated with beta and gamma rays, "which leads to a reduction in the electrical

resistance in the region which is subjected to irradiation" (col. 3, line 43 to col. 4, line 5). These limitations anticipate applicant's claims 1, 2, and 4.

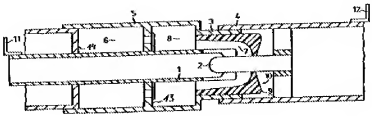


FIG 1

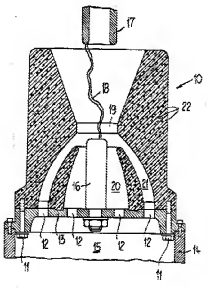
The Examiner notes the following product-by-process limitations:

- the requirement in applicant's claims 1 and 2 for the treated and untreated subvolumes to be a "mixture"
- the requirement in applicant's claim 3 for the treated subvolumes to be "embedded" in the untreated subvolumes

It has been held that "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." Please see MPEP 2113 and *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). With respect to the treated subvolumes being embedded in the untreated subvolumes, any layer wherein the untreated subvolume is present in a greater extent than the treated subvolume anticipates this claim.

4. Claims 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Graf (CH 653 477), which is in the same patent family as US Patent 4,418,256, which is used herein as an English translation.

Graf discloses a "construction of an electrically insulating plastic element or part employed for an electrically switching device...[t]he plastic element is exposed to the action of arcs and contains a filler which absorbs electromagnetic radiation" (col. 1, lines 8-14). Graf discloses parts **10** and **22** of Figure 1 at col. 2, line 59 to col. 3, line 24. Part **10** is formed of a "thermoplastic or duroplastic moldable synthetic resin or a sintered plastic" (col. 2, lines 59-61). Graf further discloses that in "both cases the plastic mass is leaned or contains admixed therein a filler or filler material **22** which absorbs the electromagnetic radiation emanating from the arc **18**" (col. 2, lines 61-64). The plastic can be comprised of tetrafluoroethylene having a proportion of at least 60% and the metal powder filler is no more than 30% by weight. This method anticipates applicant's claims 5 and 6.



Claim Rejections - 35 USC § 102/103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Zielke (WO 99/65128), as applied to claim 1, which is the international application for the US national stage patent 6,627,831, which is used herein as an English translation.

Zielke discloses all the limitations of applicant's claim 1 in section 3 above; however, Zielke is silent with respect to the specific ratio of the treated component compared to the untreated component. Zielke discloses at col. 4, lines 6-17 that the penetration depth and intensity of the radiation can be varied in order to control the depth of the region of reduced electrical resistance and the extent of molecular change within the region, respectively. The Examiner has reason to believe that the insulating part of Zielke inherently comprises treated subvolumes embedded (< 50% in amount compared to the total amount of treated and untreated subvolumes) in the untreated subvolumes, and hence anticipates applicant's claim 3.

Alternatively, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the depth and intensity of the beta and gamma

radiation to produce an insulating part having the proper amount of electrical resistance for applicant's intended use.

Double Patenting

7. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

8. Claims 1-4 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-3 of prior U.S. Patent No. 6,627,831. This is a double patenting rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerard T. Higgins, Ph.D. whose telephone number is 571-270-3467. The examiner can normally be reached on M-F 7:30am-5pm est. (1st Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 4174

Gerard T Higgins, Ph.D.
Examiner
Art Unit 4174